



# ACOUSTIC TILE SELECTION GUIDE

*For improved acoustics*

## Improving Acoustics

Auckland University Acoustic Services (AUAS) provide testing, research and development for the acoustical properties and sound measurement of building materials. AUAS are hosted by the School of Architecture within the University of Auckland's National Institute of Creative Arts and Industries. The majority of our ceiling tiles have been tested and measured by AUAS. Two of the key parameters for achieving optimized interior acoustics are sound absorption and sound attenuation.

### Sound Absorption

Noise reverberation is caused by hard surfaces such as gypsum board and concrete. These types of surfaces cause sound to reflect. Reverberation is controlled by selecting high quality sound absorbing ceiling tiles. Absorbers are classified into 5 classes rated from A to E according to ISO standard 116 54. Class A tiles are rated as extremely absorbing.

### Sound Attenuation

All interior spaces are subjected to external noise. This can come from adjacent rooms, the floor level above, mechanical equipment within the ceiling void and noise emanating from outside such as traffic, aircraft and rain. Isolating an interior space from unwanted external noise can be achieved by selecting ceiling tiles with a good level of ceiling attenuation (CAC)

### Optimized Acoustics for your project

The following chart provides a useful selection guide for the optimal combination of absorption and attenuation depending on the project application.

